



Increased myocardial expression of angiopoietin-2 in patients undergoing urgent surgical revascularization for acute coronary syndromes

Submitted by Emmanuel Lemoine on Tue, 02/24/2015 - 15:42

Titre	Increased myocardial expression of angiopoietin-2 in patients undergoing urgent surgical revascularization for acute coronary syndromes
Type de publication	Article de revue
Auteur	Fam, N. P [1], Arab, S. [2], Billia, F. [3], Han, R. [4], Proteau, G. [5], Latter, D. [6], Errett, L. [7], Bonneau, Dominique [8], Dunne, R. [9], Liu, P. P [10], Stewart, D. J [11]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2010
Langue	Anglais
Date	2010
Numéro	7
Pagination	365 - 70
Volume	26
Titre de la revue	The Canadian Journal of Cardiology
ISSN	1916-7075
Mots-clés	Acute Coronary Syndrome/blood/physiopathology/surgery [12], Aged [13], Angiopoietin-2/blood [14], Biological Markers/blood [15], Coronary Artery Bypass [16], Female [17], Humans [18], Male [19], Middle Aged [20], Myocardium/metabolism/pathology [21], Treatment Outcome [22]
Résumé en anglais	BACKGROUND: Myocardial ischemia triggers the expression of multiple angiogenic factors including vascular endothelial growth factor and its receptors. However, vascular endothelial growth factor does not act in isolation. OBJECTIVE: To identify other genes important in the angiogenic response to clinically relevant myocardial ischemia. METHODS AND RESULTS: Paired intraoperative biopsies of ischemic and nonischemic myocardium were obtained from 12 patients with acute coronary syndromes (ACS) undergoing urgent coronary artery bypass graft surgery. Real-time polymerase chain reaction demonstrated significant upregulation of angiopoietin-2 (Ang-2) in ischemic myocardium, to a greater extent than other classical angiogenic factors. Microarray gene profiling identified Ang-2 to be among the top 10 differentially upregulated genes, in addition to genes involved in inflammation, cell signalling, remodelling and apoptosis. CONCLUSIONS: The present document is the first report of microarray analysis of patients with ACS, and supports an important role for Ang-2 in the angiogenic response to severe ischemia in the human heart. Common gene expression patterns in ACS may provide opportunities for targeted pharmacological and cellular intervention.
URL de la notice	http://okina.univ-angers.fr/publications/ua8285 [23]

DOI	10.1016/S0828-282X(10)70417-7 [24]
Lien vers le document	http://dx.doi.org/10.1016/S0828-282X [25](10)70417-7
Titre abrégé	Can J Cardiol

Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=14188](http://okina.univ-angers.fr/publications?f[author]=14188)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=14189](http://okina.univ-angers.fr/publications?f[author]=14189)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=14190](http://okina.univ-angers.fr/publications?f[author]=14190)
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=14191](http://okina.univ-angers.fr/publications?f[author]=14191)
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=14192](http://okina.univ-angers.fr/publications?f[author]=14192)
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=13706](http://okina.univ-angers.fr/publications?f[author]=13706)
- [7] [http://okina.univ-angers.fr/publications?f\[author\]=13707](http://okina.univ-angers.fr/publications?f[author]=13707)
- [8] <http://okina.univ-angers.fr/d.bonneau/publications>
- [9] [http://okina.univ-angers.fr/publications?f\[author\]=14193](http://okina.univ-angers.fr/publications?f[author]=14193)
- [10] [http://okina.univ-angers.fr/publications?f\[author\]=14194](http://okina.univ-angers.fr/publications?f[author]=14194)
- [11] [http://okina.univ-angers.fr/publications?f\[author\]=14195](http://okina.univ-angers.fr/publications?f[author]=14195)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=13445](http://okina.univ-angers.fr/publications?f[keyword]=13445)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=1072](http://okina.univ-angers.fr/publications?f[keyword]=1072)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=13446](http://okina.univ-angers.fr/publications?f[keyword]=13446)
- [15] [http://okina.univ-angers.fr/publications?f\[keyword\]=12901](http://okina.univ-angers.fr/publications?f[keyword]=12901)
- [16] [http://okina.univ-angers.fr/publications?f\[keyword\]=13444](http://okina.univ-angers.fr/publications?f[keyword]=13444)
- [17] [http://okina.univ-angers.fr/publications?f\[keyword\]=1075](http://okina.univ-angers.fr/publications?f[keyword]=1075)
- [18] [http://okina.univ-angers.fr/publications?f\[keyword\]=991](http://okina.univ-angers.fr/publications?f[keyword]=991)
- [19] [http://okina.univ-angers.fr/publications?f\[keyword\]=968](http://okina.univ-angers.fr/publications?f[keyword]=968)
- [20] [http://okina.univ-angers.fr/publications?f\[keyword\]=5941](http://okina.univ-angers.fr/publications?f[keyword]=5941)
- [21] [http://okina.univ-angers.fr/publications?f\[keyword\]=12817](http://okina.univ-angers.fr/publications?f[keyword]=12817)
- [22] [http://okina.univ-angers.fr/publications?f\[keyword\]=6062](http://okina.univ-angers.fr/publications?f[keyword]=6062)
- [23] <http://okina.univ-angers.fr/publications/ua8285>
- [24] [http://dx.doi.org/10.1016/S0828-282X\(10\)70417-7](http://dx.doi.org/10.1016/S0828-282X(10)70417-7)
- [25] <http://dx.doi.org/10.1016/S0828-282X>

Publié sur *Okina* (<http://okina.univ-angers.fr>)